

# BUREAU OF ENVIRONMENT

## CONFERENCE REPORT

**DATE OF CONFERENCES:** October 5, 2006

**LOCATION OF CONFERENCES:** J.O. Morton Building

**ATTENDED BY:** Cathy Goodmen, Mark Hemmerlein, Charles Hood; Kevin Nyhan, Robert Landry, Joe Patusky, Marc Laurin, Christine Perron, Darrell Elliott, Steve Liakos, Bob Juliano, Mark Richardson, and Dave Powelson, NHDOT; Jim Garvin, Linda Wilson, and Edna Feighner, NHDHR; Harry Kinter, FHWA; Deb Loiselle and Steve Landry, DES and Jeff Tucker, Dubois and King; Jamie Paine, CLD; Karl Roenke and Jonathan Ruhan, National Forest Service; Bill Barry, VHB

**SUBJECT:** Monthly SHPO-FHWA-ACOE-NHDOT Cultural Resources Meeting

Thursday, October 5, 2006

**Advertising Regulations / Interstate. Participants: Harry Kinter, FHWA and Karl Roenke and Jonathan Ruhan, Forest Service.**

K. Roenke explained that the Forest Service was proposing to place a second-hand fire tower along the I-93 corridor to advertise its presence. It would not be on Forest Service land. He wondered since much of the corridor in that area lacked such advertising whether this would be legal or not. H. Kinter indicated that, as long as it was an on-premise sign, there were no federal regulations that prohibited such signage. He suggested contacting the Bureau of Traffic to make sure that state law did not prohibit the sign.

**Manchester: Maxwell Pond Dam (aka Black Brook Dam) # 150.07. Participants: Deb Loiselle and Steve Landry, NHDES.**

Deb Loiselle provided a brief summary of the history of the dam and the proposed dam removal project. This dam is owned by the City of Manchester. She noted that this dam had been proposed for removal back in 2003 at which time Steph Lindloff (River Restoration Coordinator at the time) and Steve Landry had coordinated with Edna Feighner and Jim Garvin to determine the effects the proposed project would have on potential historic resources. Over the years there has been much discussion amongst the City of Manchester officials on the future of this dam. In short, during the summer of 2006, the Mayor and Aldermen voted to move forward with plans to remove the dam. As a result, the City of Manchester is working with a consultant (Dubois and King), NHDES and other project partners to assure that all issues are considered relative to the proposed project.

Although this project had been reviewed in the past, D. Loiselle indicated that previous correspondence failed to clarify the overall effect of the dam removal and the affiliated river restoration work on historical resources. E. Feighner noted that there are no archaeological

resources that will be affected as a result of this project due to the disturbance that has occurred over the years as well as the additional damage that occurred as a result of the May 2006 flooding. J. Garvin discussed the impact of the project on the dam, gate structure and wing walls. He noted that there has been a lot of change since the construction of the dam such as the removal of the icehouse, the placement of a playground and the surrounding housing development. As a result, there has been a loss of context and the dam (or extant structures) would not be eligible for the National Register of Historic Places. D. Loiselle also pointed out that there had been alterations to the dam since the original construction in 1900, and specifically noted the difference in the gate structure and removal of the catwalk. D. Loiselle verified if the removal of the gate structure and/or wing walls would have an adverse effect. J. Garvin, L. Wilson and E. Feighner all agreed that it would not.

J. Garvin inquired about the release of the sediment behind the dam and within the impoundment. S. Landry explained that although it has not been discussed at length, the initial feeling is to remove the dam incrementally to allow the sediment to de-water slowly and prevent adverse impacts to aquatic species. S. Landry also explained that the City of Manchester has applied for a 319 grant for the project and is working with DuBois and King to develop a scope-of-work for this project. S. Landry also informed the attendees that the City of Manchester is considering placing a trail around the current impoundment in the future. NHDHR requested an opportunity to review the plans with the City of Manchester if this comes to fruition as it may have historic resource impacts. S. Landry and D. Loiselle noted they would relay this review request to the City of Manchester representatives for future reference.

E. Feighner, J. Garvin and L. Wilson agreed that no archaeological or architectural survey or photo-documentation would be necessary, and thus a “No Historic Properties Affected” determination was made. E. Feighner asked that a letter from NHDES summarizing this discussion be sent to her attention at NHDHR so that a formal “No Historic Properties Affected” memo can be prepared.

**Rye, MGS-BRF-X-T-0221(010), 13269. Participant: Cathy Goodman, Joe Patusky, Bob Aubrey, and Alex Vogt.**

This project replaces a red-listed timber bridge on NH Route 1A in Rye, over Seavey Creek, which was found eligible for the National Register. In the minutes of August 2, 2001, NHDHR asked the Department to replicate the look and feel of the existing bridge if it could not be retained including the openness, symmetry, and approximate number of pilings of the current bridge. The design was to fit the ambiance of the coastal area.

J. Patusky presented four options for replacing the bridge. The new bridge will be widened several feet to allow shoulders along with the sidewalks. The options are: 1. a timber bridge of the same design with one option using pilings with creosote preservative, a hazardous material, and the other using African hardwoods, which are hard to source at about 1 million/25 years of service; 2. a concrete bridge composed of box beams with concrete pilings, which has the longest life expectancy and least maintenance at 1.5 million; 3. a prefabricated laminated wood bridge with wood pilings, which would mimic the timber bridge with wood pilings but reduce the number of spans and install compliant railings at 900,000/35 years of service; and 4. a prefabricated wood bridge with steel and concrete pilings that would mimic the timber bridge with 50 years of service. The later bridge would include four bents and a metal rail element.

The costs of each option, their life span, and time frame for construction were presented. All options maintain a low profile like the existing bridge. The new bridge will be on the same footprint as the existing and will impact only a small area around the current bridge including slope work and temporary impacts for installing the pilings. These options will be presented to a public meeting in Rye on October 19, 2006. There was no opposition to any of the designs, and it was decided to wait until after the public meeting to see which option the local residents preferred. This information will be presented for review at a cultural resources meeting as the design is being finalized. J. Garvin indicated that as long as the chosen option fitted within the context of the park that it would be acceptable to NHDHR. The commitment to fence the timber dam at the shoreline was noted. There may be minor impacts outside of the right-of-way to permit access and some permanent slope easements.

**Derry-Londonderry, IM-0931(201), 13065. Participants: Marc Laurin and Jamie Paine, CLD.**

J. Paine gave a brief description of the Reed Paige Clark property in Londonderry and noted the relationship of the “potato field” to the current I-93 footprint and the property. During the I-93 EIS review of the property with DHR and FHWA, the lot located on to the east side of I-93 was not included as part of the historic Reed Paige Clark property. However, DHR recently questioned whether it still contributes to this resource. J. McKay did a walkover of the site. She observed that although this lot was once part of the farmstead, it no longer retains any integrity as a potato field because of disturbance from the construction of I-93, stony soils, steep slopes, and the presence of a cell tower and wetlands. L. Wilson and H. Kinter agreed that it no longer retained integrity and confirmed that the lot on the east side of I-93 is not a part of the Reed Paige Clark historic resource.

J. McKay presented her evaluation and description of the potential for the presence of an historic district in downtown Derry along Broadway (NH 102). There is a large intrusion where the new Rite-Aid has been constructed, the former Town Hall location, at the intersection of Crystal Ave/Birch St. (NH 28) with Broadway (NH 102). However, a District could potentially be identified along Broadway. J. Paine stated that during previous reviews for the Exit 4A project, this area has not been formally identified by DHR as a district. M. Laurin noted that in a recent project review, for DOT’s proposed reconstruction of the Crystal Ave/Birch St. intersection with Broadway (Derry, 13249), this area is referred to as a “multiple-resource district,” however its boundaries were left undefined. After further discussions on the location of individual eligible resources and of potentially contributing structures previously identified along Broadway, a consensus was reached on the limits of this downtown Derry district (identified as the Broadway Historic District). The district extents west along Broadway from High Street on the north side and Fordway Street on the south side, and continues east to Hood Road on the north side and Mt. Pleasant Street on the south side. These established east-west boundaries describe the properties that would be affected by Alternative F (the upgrade of NH 102), and H. Kinter and L. Wilson agreed that the boundaries to the north and south could remain undefined. The Section 106 impacts of Alternative F would be Adverse. Constructive Use Section 4(f) impacts would occur due to the elimination of on-street parking within a large portion of the commercial downtown area.

**Unity 14557A (no federal number). Participant: Jamie Paine.**

J. Paine presented this project for a proposed arch replacement project in Unity. A corrugated steel plate arch structure that carried Unity Stage Road over the Little Sugar River in the Town of Unity, was washed out during the fall flood of 2005. Unity Stage Road is a rural, residential road with relatively low traffic volumes. The structure was approximately 60 feet long with a 29.4-foot span, which was estimated from the existing footings still in place. It was placed on concrete footings on a 16-degree skew, and the roadway at the bridge was approximately 25 feet from guardrail-to-guardrail, according to the NHDOT Inspection Report. Since the structure washed out, the channel slopes have been re-graded to an approximate 2:1 slope up to the road.

The Engineering Study Report has been completed and approved by NHDOT. Borings are currently underway as part of the Preliminary Plan Submission. The first task performed during the Engineering Study was the hydraulic analysis. Three structure concepts were evaluated hydraulically. These options were:

- to replace the bridge in-kind with a metal plate arch with the original span length;
- to place a larger pre-cast concrete arch structure within the river banks; and
- to construct a bridge to span as much of the riverbanks as possible.

The result of the hydraulics study indicates that a bridge with stub abutments is the only option that provides sufficient freeboard in a 100-year flood. The largest pre-cast concrete arch option, a 53'-11" span x 15' rise pre-cast concrete arch structure, provides just under six inches freeboard, which is less than required and does not meet standard specifications. The replace in-kind option also does not meet the hydraulic requirements and does not adequately pass the 100-year flow, as the waterway opening is less than the much larger pre-cast concrete arch option.

The existing Stage Road approaching the bridge is on a horizontally curved alignment that does not meet AASHTO requirements. Two roadway alignment options were examined to alleviate this problem and are discussed below.

**Option 1 – Through Roadway:** Option 1 explores maintaining the existing throughway of Unity Stage Road at the intersection by altering it to meet current standards. In order for this option to meet the guidelines for a 30 mph local road, the curve of Unity Stage Road at the intersection would need to be a minimum radius of 250 feet. The 250-foot radius is much larger than existing and would substantially impact the adjacent wetlands at the outlet of Sawyer Brook. Wetland impacts of 3,434 sf would occur. Also, the Sawyer Brook Culvert crossing under Unity Stage Road would need to be removed and replaced.

**Option 2 – 4-Way Stop:** An alternative to maintaining Unity Stage Road as a through road is to realign the intersection to provide a 4-way stop. Option 2 follows the existing roadway fairly closely along the bridge and terminates at the intersection with a stop sign. This options results in fewer slope impacts outside the bridge crossing area and approximately 1,841 sf of wetland impact. This is also the more cost effective option.

Due to cost, wetland and property impacts, duration of construction, as well as ease of construction, Option 2 was recommended as the most practical and cost-effective option. Length of construction time is an important factor as the Town wishes to complete construction in 2007.

Structure alternatives were then explored in the report. Two bridge types, a steel girder bridge and a pre-stressed concrete box beam bridge, that are similar in plan and pass hydraulics requirements for the 100-year flood, were explored. Both bridge options are 90-foot, single spans with stub abutments placed as far up the existing riverbanks as possible. The third structure option explored was a 54-foot span pre-cast concrete arch, which did not pass the 100-year flood criteria. The steel girder option was recommended on Alignment Option 2 as the hydraulic requirements are met, and it is the most cost-effective structure option.

L. Wilson and E. Feighner determined that the project would have no effect on historic or archaeological resources as is currently proposed. However, E. Feighner requested the ability to examine more finalized plans of the chosen option.

**Portsmouth, BRF-X-0182(066), 10665. Participants: Bill Barry ([wberry@vhb.com](mailto:wberry@vhb.com)).**

Bill Barry gave a brief status report of the project. At the last meeting in April 2006, VHB provided 15 Individual Inventory Forms that had been developed in 1995. No individual determinations of eligibility were officially made in 1995, except for the conclusion that the corridor did not contain any neighborhoods eligible as historic districts. At the April meeting, VHB was asked to prepare an update to the Area Form for the corridor including summary on method and status of the existing project with new streetscape photographs; to update the original inventory forms with new photographs, descriptions of changes, and eligibility statements; and to create three new Individual Forms for the Samuel Sherburne House (#POR0023, eligible), Calvary Cemetery (#POR0025, not eligible), and the Two Mile Bridge/Hayes Bridge over B&M Railroad (#POR0114, contributing element to eligible railroad corridor). This work was completed by VHB and the forms sent to Joyce McKay in September 2006. Bill also reminded the group that the Phase 1A Archaeological Report from Kathy Wheeler had been submitted to NHDOT and that VHB was hoping to discuss the scope of the Phase 1B work at the group's November meeting.

Chris Baker (VHB) provided a brief overview of the proposed bridge replacement and associated highway improvements. The City of Portsmouth has also asked whether a new parking lot on the east side of Plains Park could be added to this project. The group agreed that this would be acceptable. It was pointed out that the Section 4(f) Evaluation for the possible effects on Plains Park as a recreational resource would not have to address the impact of the parking lot, but would only need to refer to it as being funded separately by the City.

Chris Baker was asked by NHDHR if there were any way to preserve in-place the granite abutments of the railroad bridge. He stated that the location of the bridge was effectively very tight and options for a greater span width or bridge height were impossible. To gain the necessary width, removal of the historic abutments is unavoidable.

The committee was asked for guidance concerning the need for additional Individual Forms to properly evaluate the impacts from the proposed parking lot? After some discussion, it was concluded that the three structures on the east side of the park (Patterson & Son Plumbing structure, the old schoolhouse, and a home in the northeast quadrant of the Peverly Hill Rd/Greenland Road intersection) should be inventoried. Also requested was an inventory form for a fourth structure, a store, in the southeast quadrant of the same intersection. The committee felt it would probably not be necessary to prepare forms for houses down Patterson Street since they were effectively too far removed from any visual impacts from the parking lot.

The recommended sensitivity areas for the Phase 1B archaeological surveys were also discussed. The committee agreed that the proposed parking lot area, the street edge of Calvary Cemetery, a small area just west of St. Mary's cemetery identified in Kathy Wheeler's report, and the area underlying the footprint of the realigned Islington Street would need testing at a Phase IB level. Additional survey in front of St. Mary's Cemetery is not needed because the only impact will be a fill slope, including a new, short driveway entrance along its frontage on Greenland Road. Even though the parking lot area is funded solely by the City of Portsmouth, it is being incorporated into the larger Federal Highway funded project, therefore Section 106 applies to the parking lot. A massacre site may exist in this vicinity.

**Salem-Manchester, IM-IR-0931(174), 10418C. Participant: Marc Laurin.**

M. Laurin discussed a detention basin to be located within Parcels S 174 and S175 in Salem south of Raymond Ave on the east side of I-93. Potential impacts could occur to the stone abutments of a trolley line spur culvert. This area is outside the original area of impacts reviewed in the FEIS. J. Garvin thought that more information on the trolley line spur corridor and the associated abutments would be needed. H. Kinter and E. Feighner agreed. L. Wilson also stated that it would be preferable to avoid impacts to these abutments. J. McKay pointed out that this was a discontinuous remnant of a spur line, and only the abutments remained. She also pointed out that it would probably not be eligible, especially since the Point A trolley stop area, located to the north off S. Policy and Fairmount Roads, was previously determined not eligible. A discussion ensued about the appropriateness of requiring more information on this spur line. Agreement was reached that L. Monroe will look at the abutments, photograph them, and review the previously done research on the Point A trolley stop area to determine the spur line's relationship with Point A.

**Surplus Lands. Participant: Christine Perron.**

Enfield, SP-2006-8

The Town of Enfield is requesting an easement of 3,250 linear feet along the Northern Railroad corridor (now a rail trail) for the installation of a sewer line. The site is located along the Mascoma River, approximately 0.5 mile from Mascoma Lake, a potentially archaeologically sensitive area. Since the town does not yet have information regarding the exact location and depth of the sewer line, this easement request will need to be reviewed again when this information is available. If the line is installed outside of the existing disturbed areas adjacent to the trail, the town will be expected to have an archaeological survey completed prior to its installation.

Milford, SP-P7105

Habitat for Humanity has requested the opportunity to purchase two parcels located on Osgood Road adjacent to the NH Route 101 overpass. The smaller parcel (0.25 ac) consists of early successional forest as a result of disturbance during the construction of NH Route 101. The parcel was not sensitive for archaeological resources and architectural resources were not present. The larger parcel (0.7 ac) consists of an open field. It was requested that the history of this parcel be researched in order to determine if the parcel once had any structures that would indicate the possible presence of archaeological resources.

**Bath-Littleton 13427 (no federal number). Participant: Christine Perron.**

This project consists of replacing existing cable guardrail with beam guardrail and extending several sections of guardrail with appropriate terminal end units. The project is located on NH Route 302, beginning 1500 feet north of the Haverhill/Bath town line, continuing north for 7.5 miles, and ending 1500 feet north of Bath/Landaff town line. All work will be confined to the existing right-of-way. It was determined that no historic or archeological resources would be impacted by this project.

**Stratford-Maidstone, STP-TE-X-000S(327), 13086. Participants: Mark Hemmerlein and Charlie Hood.**

The Department proposes to place a parking lot adjacent to the Stratford-Maidstone Bridge, perhaps yet this fall. The parking lot would be located south of the roadway to the bridge near the riverbank to reduce the length of the walkway to the riverbank. However, the project does require work along the riverbank to install steps down to the average high water mark. Additionally, minimal landscape plantings adjacent to the bridge/river and the parking area are proposed. District 1 has agreed to construct the parking lot and to assist the conservation group with the excavation for the steps along the riverbank. The parking lot will require one foot of fill and six inches of gravel. Vegetation will be cleared from the riverbank. E. Feighner responded that the area is relatively disturbed and did not request further consideration for archaeological resources.

**Alstead Buy-Out Properties. Participants: Bob Landry and Charlie Hood.**

Linda Wilson indicated DHR's request for mitigation for the buy-out properties. She requested that all three buildings be advertised for sale without covenants.

39 River Street: Bob Landry was not certain whether this buyout would include FEMA funding or not. L. Wilson requested a minimal HABS in addition to the existing front form, including large format photographs, a sketch plan, description, and narrative history.

15 Forest Road: It was noted that this building could be moved elsewhere on the property. However, B. Landry indicated that the property owners did maintain salvage rights for six months. Linda Wilson requested a measured floor plan, large format photographs, a description, and narrative history including some discussion of the Queen Anne style represented by the building.

18 High Street: Linda Wilson requested a minimal HAER document that would cover that portion of the building that pre-dates the 1950s with emphasis on its use as a foundry. Documentation would include large format photographs, a sketch plan, description, and narrative history.

If federal funding or permitting is involved, L. Wilson also requested the completion of a minimal district area form to define and support historically and through survey the boundaries of the district and an assessment of contributing and noncontributing to address the question whether the district extend to 39 River Street.

B. Landry directed that the authorization should be placed under the M project, but authorized separately from historical reviews related to the road reconstruction.

**Bartlett 14372. Participants: Mark Hemmerlein, Steve Liakos, Bob Juliano, and Mark Richardson.**

Mark Hemmerlein requested some background statements for the preparation of a 4(f), given that the project as proposed would produce an adverse effect. He noted that Steve Liakos had received about 40 letters, about 13 of which favored retention of the bridge and the remainder requested its removal. He noted that all but one selectperson favored removing the bridge; one was neutral. Additionally, an ad hoc group had formed to save the bridge.

When Harry Kinter sent the request for legal advice from Attorney Black, this public response had not been included. He indicated that the 4(f) would need to include a statement of the alternatives, indicating the preferred alternative of removal. The difficult aspect would be to demonstrate project need since there was no life safety issue that has been identified. One letter sent to Steve Liakos indicated that the bridge had become an attractive nuisance and an abutter had expressed concern about the chipping lead paint.

Bill Hauser stated that the NHDOT could not divorce this bridge removal project from the original project, which did not complete the 4(f) because the bridge was to remain in place. By so doing, it was not the NHDOT's intent to commit to long-term maintenance. When this process was started, it was assumed that everyone in Bartlett agreed with the bridge's removal. However, this is not the case. B. Hauser asked Harry Kinter if the NHDOT needed to advise Attorney Black of the current status of the project and obtain another reading on the 4(f) process in regards to this project, noting that NHDOT did not honor its commitment to painting the bridge. Harry Kinter responded that what drives the problem and the content of the 4(f) is that there is no entity willing to undertake long-term maintenance on the bridge. What needs to be saved is the process.

Linda Wilson asked if the notification letter had been sent to the Council. H. Kinter indicated that it had not. Since the project is 17 plus years old, he did not believe it was subjected to the Consulting Party provisions of Section 106. Yet, the Council may still wish to become involved. H. Kinter agreed to put together the following information: a letter to the Advisory Council advising them of the project and a second letter to Attorney Black requesting his opinion on the question of 4(f) in the light of the expressed concern about the bridge's removal, realizing the issue with project segmentation has not changed.

It was noted that SHPO has not weighed-in concerning mitigation if the bridge were removed. Typically an effect memo is completed indicating both the type of effect on the property and if adverse some concurrence concerning mitigation. The MOA would spell this out in a more formal manner.

**Bridge Inventory Form. Participants: Dave Powelson and Harry Kinter**

The need to re-evaluated historic bridges given the loss and, in some cases, the incompleteness of the original 1985-89 inventory as well as to assess those that have become 50 years old in the last 20 years was presented. This directive is mandated by federal law under the Historic Bridge Program, Section 144(o), enacted in the 1987 Surface Transportation and Uniform Relocation



Assistance Act. Three related issues were discussed: the composition of the types, the manner of this re-evaluation, and the form that would be used to evaluate the types.

Because of the current losses among the metal truss bridges, the re-evaluation will begin with these bridges. It was agreed that the study would evaluate the generally accepted broad truss types, for example as defined in the original survey and confirmed in the recent study of bridge types: "A Context for Common Historic Bridge Types," a NCHRP project 25-25 completed in October 2005. Under the broad bridge types, subtypes such as high, low, and deck trusses would be recognized. Some bridge types may warrant further subdivision depending on the engineering characteristics of the type.

N. Peterson had completed a review of other states' current survey methods utilized to reassess bridge types. New Hampshire's 1985-89 inventory was completed using the point system, which did not take into account whether the bridge was a contributing element to a historic district or linear resource or whether it gained significance under other contexts than the bridge type. Her review included the websites completed by the AASHTO Center for Environmental Excellence and FHWA's historic preservation program. While many of the original surveys completed in the 1980s and early 1990s had utilized a scoring system similar to the one used by New Hampshire, assessment efforts since 1990 have employed a contextual approach. These states include Vermont, Connecticut, Ohio, Delaware, Oklahoma, New Jersey, Maryland, Pennsylvania, and New York. Indiana is currently contemplating updating its survey and has not fully determined the approach to the bridge evaluation. The contextual approach usually entails completing a multiple property nomination to identify and evaluate historic bridges. It was agreed that the multiple property document format facilitates evaluation. This approach evaluates groups of related significant properties, in this case bridges belonging to a single type. Information common to the group of properties is presented in an overview narrative, while information specific to each property is provided on an individual form. It clearly delineates the character defining elements for each bridge type, providing a comparative framework for assessment. The document thus examines the property type in a comparative fashion. Because of the comparative framework, the document can provide broad preservation priorities for the future based on historical significance. DHR indicated its clear preference for this approach, and H. Kinter stated that this was the appropriate direction.

Finally, the form put together for the evaluation effort for each bridge was reviewed. J. Garvin had suggested some additions that will be incorporated into the form.

**\*\*Memos:** Stewartstown, X-A000(496), 14767 and Carroll, X-A000(497), 14768

Other projects may also be reviewed.

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